Amendments to the Drawings

The attached sheet of drawings includes changes to Fig. 2. This sheet, which includes Figs. 1 and 2, replaces the original sheet that includes those same Figures.

Fig. 2 has been amended to add a box labeled "Refrigerator."

Attachment: Replacement Sheet (1)

REMARKS

Applicants thank the Examiner for the very thorough consideration given the present application.

Claims 1-2 and 6-8 are now present in this application. Claims 1 and 8 are independent.

By this Amendment, amendments have been made to the drawings, claims 3-5 and 9-15 are canceled without prejudice, and claims 1, 6 and 8 are amended. No new matter is involved.

Reconsideration of this application, as amended, is respectfully requested.

Priority Under 35 U.S.C. § 119

Applicants thank the Examiner for acknowledging Applicants' claim for foreign priority under 35 U.S.C. § 119, and receipt of the certified priority document.

Objection to the Drawings

The Examiner has objected to the drawings because the "refrigerator" of claim 3 is not shown. In order to overcome this objection, Applicants are concurrently submitting amended drawing Fig. 2, which addresses the deficiency pointed out by the Examiner. Applicants are amending Fig. 2 to show the refrigerator recited in the claims and described in the specification.

Accordingly, reconsideration and withdrawal of this objection are respectfully requested.

Rejection Under 35 U.S.C. § 102

Claims 1, 2, 6, 7 and 11 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Application Publication 2002/0113565 to Kim et al. ("Kim"). This rejection is respectfully traversed. The rejection is moot with respect to claim 11, which has been canceled.

A complete discussion of the Examiner's rejection is set forth in the Office Action and is not being repeated here.

A prior art reference anticipates the subject matter of a claim when that reference discloses every feature of the claimed invention, either explicitly or inherently. In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997) and Hazani v. Int'l Trade Comm'n, 126 F.3d 1473. 1477. 44 USPQ2d 1358, 1361 (Fed Cir. 1997). While, of course, it is possible that it is inherent in the operation of the prior art device that a particular element operates as theorized by the Examiner, inherency may not be established by probabilities or possibilities. What is inherent, must necessarily be disclosed. In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981) and In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).

During patent examination the PTO bears the initial burden of presenting a *prima facie* case of unpatentability. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444(Fed. Cir. 1992); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984).

Moreover, as stated in MPEP § 707.07(d), where a claim is refused for any reason relating to the merits thereof it should be "rejected" and the ground of rejection fully and clearly stated.

Additionally, findings of fact and conclusions of law by the USPTO must be made in accordance with the Administrative Procedure Act, 5 U.S.C. § 706(A), (E) (1994). Zurko v.

Dickinson, 527 U.S. 150, 158, 119 S.Ct. 1816, 1821, 50 USPQ2d 1930, 1934 (1999).

A claim limitation is inherent in the prior art if it is necessarily present in the prior art, not merely probably or possibly present. Rosco v. Mirro Lite, 304 F.3d 1373, 1380, 64 USPQ2d 1676 (Fed. Cir. 2002). The dispositive question regarding anticipation is whether one skilled in the art would reasonably understand or infer from the prior reference's teaching that every claim feature or limitation was disclosed in that single reference, Dayco Products, Inc. v. Total Containment, Inc., 329 F.3d 1358, 1368, 66 USPQ2d 1801 (Fed. Cir. 2003).

Initially, Applicants respectfully submit that Kim does not qualify as prior art under 35 USC § 102(b). In order to so qualify, Kim would have had to be patented or published more than one year prior to Applicants' effective filing date (see, for example, MPEP §§ 706.02(b) and (c)). Applicants' U.S. filing date under 35 USC § 371 is October 6, 2003 and Applicants' effective filing date under 35 USC § 119 is December 20, 2002, and the publication date of Kim is August 22, 2002, which is less than one year prior to Applicants' effective filing date of December 22, 2002. In order to perfect their benefit claim under 35 USC § 119(a)-(d), Applicants are submitting, as an attachment, an accurate English language translation of the Kim Published Patent Application, and a statement that the translation is accurate.

Under the circumstances, Applicants will treat this rejection as being made under 35 USC § 102(e).

As amended, claim 1 positively recites a combination of features, including a control unit for generating a control signal for selecting a main winding coil of a linear motor of a compressor when at least one of an inside temperature of a refrigerator and an ambient temperature is the same

as or smaller than a predetermined reference temperature value or an auxiliary winding coil when at least one of the inside temperature of the refrigerator and the ambient temperature is greater than the predetermined reference temperature value; and a switching unit for selecting the main winding coil of the linear motor or the auxiliary winding coil on the basis of the control signal, wherein the main winding coil of the linear motor is divided into a plurality of auxiliary winding coils, load capacity is determined based on at least one of the inside temperature of the refrigerator and the ambient temperature, and the control unit controls the amount of current flowing into the winding coil of the linear motor by computing the generated control signal..

Kim does not disclose this combination of features.

Kim explicitly discloses that part 100A-1 is Kim's "motor," and that the motor's main winding is a single coil which Kim designates as a "main coil" and labels as "MC." Kim explicitly states, in col. 4, lines 17-18, that "[T]he coils MC, SC1-SC4 of the motor 100A-1 includes the main coil MC and the plurality of sub-coils SC1-SC4."

Moreover, Kim discloses that its main coil MC is always operated with at least one sub-coil. This is clear from inspection of Fig. 3, and the discussion of how Fig. 3 operates, found on pages 2 and 3 of Kim, including from paragraph [0039] to paragraph [0053]. For example, the greatest stroke is disclosed as being obtained when the first relay Ry1 is used with main coil MC, and the smallest stroke is disclosed as being obtained when the fifth relay Ry5 is used with main coil MC (col. 5, lines 25-29). Because of this, Kim does not disclose a control unit for selecting either the first auxiliary winding coil alone or the first and second auxiliary winding coils in series of the linear motor of the compressor on the basis of load capacity, as claimed.

Kim always selects both the main coil and at least one sub coil on the basis of load capacity. Also, for this same reason, Kim does not disclose a switching unit for selecting either the first auxiliary winding coil alone or the first and second auxiliary winding coils in series of the linear motor of the compressor on the basis of the control signal. Kim always selects both the main coil and at least one sub coil, and never selects either the first auxiliary winding coil of the linear motor or the first and second auxiliary winding coil on the basis of the control signal, as recited.

Additionally, the subject matter of claim 5, which is not under rejection as being anticipated by Kim, has been added to claim 1. That is, claim 1 also recites that the control unit outputs a control signal for selecting the main winding coil of the linear motor when at least one of the inside temperature of the refrigerator and the ambient temperature is the same or smaller than the predetermined reference temperature. Kim clearly does not disclose this positively recited feature.

Also, Kim does not disclose a refrigerator embodiment. Rather, Kim only discloses an air conditioner embodiment. Thus, the refrigerator temperature features of the claims are not found in Kim.

Furthermore, with respect to claim 2, Kim's control unit does not generate a control signal for selecting either the first auxiliary winding coil alone or the first and second auxiliary winding coils in series when a voltage applied to the linear motor is varied. Kim always selects the main coil MC and one or mode auxiliary coils (sub-coils).

Similar comments apply to claim 6, which is phrased in the alternative, not the conjunctive, like claims 1 and 2.

Rejections under 35 U.S.C. § 103

Claims 3-5 and 8-10 and 12-15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kim '967 in view of U.S. Patent 6,877,326 to Kim ("Kim '326"). This rejection is respectfully traversed. The rejection is moot with respect to claims 12-15, which have been canceled.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

Because the rejection is based on 35 U.S.C. § 103, what is in issue in such a rejection is "the invention as a whole, "not just a few features of the claimed invention. Under 35 U.S.C. § 103, " [a] patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." The determination under §103 is whether the claimed invention as a whole would have been obvious to a person of ordinary skill in the art at the time the invention was made. See In re O'Farrell, 853 F.2d 894, 902, 7 USPQ2d 1673, 1680 (Fed. Cir. 1988). In determining obviousness, the invention must be considered as a whole and the claims must be considered in their entirety. See Medtronic, Inc. v. Cardiac Pacemakers. Inc., 721 F.2d 1563, 1567, 220 USPQ 97, 101 (Fed. Cir. 1983).

In rejecting claims under 35 U.S.C. §103, it is incumbent on the Examiner to establish a factual basis to support the legal conclusion of obviousness. See, In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the

factual determinations set forth in Graham v John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one of ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal Inc. v. F-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v Delta Resins & Refactories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hospital Systems, Inc. v Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a *prima facie* case of obviousness. Note, In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be suggested or taught by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1970). All words in a claim must be considered in judging the patentability of that claim against the prior art. In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

A suggestion, teaching, or motivation to combine the prior art references is an "essential evidentiary component of an obviousness holding." C.R. Bard, Inc. v. M3 Sys. Inc., 157 F.3d

1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998). This showing must be clear and particular, and broad conclusory statements about the teaching of multiple references, standing alone, are not "evidence." See In re Dembiczak, 175 F.3d 994 at 1000, 50 USPQ2d 1614 at 1617 (Fed. Cir. 1999).

Moreover, it is well settled that the Office must provide objective evidence of the basis used in a prior art rejection. A factual inquiry whether to modify a reference must be based on objective evidence of record, not merely conclusory statements of the Examiner. See, In re Lee, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002).

Furthermore, during patent examination, the PTO bears the initial burden of presenting a *prima facie* case of unpatentability. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785788 (Fed. Cir. 1984). If the PTO fails to meet this burden, then the Applicant is entitled to the patent. Only when a *prima facie* case is made, the burden shifts to the applicant to come forward to rebut such a case.

Applicants respectfully submit that this Application, i.e., Serial No. 10/538,491, and the applied Kim reference are commonly assigned to LG Electronics, Inc, the assignment documents having been recorded in the USPTO. Applicants also state that at the time of the invention of the subject matter of claims 3-5 and 8-10, the applied Kim published patent application were assigned to LG Electronics, Inc. Because of this, Applicants respectfully submit that the applied Kim published patent application is not prior art to Applicants under 35 USC § 102(e)/103(a).

Additionally, Applicants respectfully submit that the claimed invention patentably defines over the Kim-Kawai reference combination because of the shortcomings of Kim discussed above

and because Kawai is not applied to remedy those shortcomings. In other words, even if, solely for the sake of argument, one of ordinary skill in the art were properly motivated to modify Kim in view of Kawai, as suggested in this rejection, the so-modified version of Kim would not render obvious the claimed invention.

Accordingly, this rejection of claims 3-5, 8-10 and 12-15 is improper and should be withdrawn.

Reconsideration and withdrawal of this rejection of claims 3-5, 8-10, and 12-15 are respectfully requested.

Additional Cited References

Because the remaining references cited by the Examiner have not been utilized to reject the claims, but have merely been cited to show the state of the art, no comment need be made with respect thereto.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Robert J. Webster, Registration No. 46,472, at (703) 205-8000, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Date: April 14, 2008

Respectfully submitted,

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Attachment: Replacement Drawings (1 Sheet)
Priority Document KR 10-2002-0081874 and Verified English Translation thereof